

APPLICATION #CL1-00512-1

STAFF ANALYSIS

FEASIBILITY:

Project Scope: The project will build-out existing undeveloped leased space for use as a shared hESC research laboratory. There is no description of the work to be undertaken other than one existing laboratory bench in the space will be retained. The plans provided are schematic and indicate that the build-out will involve installation of benches, and placement of equipment such as biosafety cabinets and freezers within a single open laboratory space.

The proposed improvements involve 1,500 square feet described as assignable square feet (asf). There is no gross area provided. The area of work could not be confirmed as the drawings do not include a scale.

Project Management: The proposal identifies construction management processes that are in place at the institution. As the project is located in leased space, and a contractor has been designed to accomplish the work. A Change order review process is in place.

COST:

The proposed construction amount represents a lump sum amount of \$400 per square foot including architectural fees. It is noted that this amount includes all construction costs (benches, casework, fixtures, cabling, HVAC, permits connections to emergency generator support, plumbing, etc). The design fees and project contingency represent 23 percent of the construction amount which is within the RFA budget guidelines of 25 percent. No administrative costs are budgeted.

The overall cost per asf for the renovation work is \$438. To convert this to a comparable figure for gross square feet (gsf) in a typical research-intensive building, one would assume an overall building efficiency of assignable-to-gross area of 60 percent. Thus, the 1,500 asf would equate to 2,500 gsf if one considers the full complement of building space (e.g. the gross building area including circulation and support) constructed to support the area to be renovated. Using this calculated gross area, the cost per gsf would amount to \$263/gsf. This provides a more meaningful comparison to new laboratory building construction costs. We conclude that the average cost for new laboratory construction would be about \$600/gsf, excluding land and site utilities. This amount would vary widely within California, but is being used here as an indicator of new construction value for comparative purposes. Based on this comparison, we conclude that the renovation work represents about 44 percent of the cost of new laboratory space. Capital funding guidelines indicates that costs should not exceed about 65 percent of new

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construction in order to be considered a reasonably good investment to provide new hESC laboratory space.

The applicant indicates that the shared laboratory would be able to accommodate the NIH-free laboratory space needs for 10 Principal Investigators (PIs) based at this institution with others PI's in the area to use the facility. The cost per institutional-based PI would be about \$66,000. Based on CIRM funding only (construction and equipment) the cost per institutional-based PI is \$132,586.

TIMELINE:

The applicant indicates that this build-out if space is part of a larger project where additional leased space was secured for a period of 10 year. Design work on the project has been initiated and working drawings are to be completed in April 2007. Construction would be by the leasor and would begin in July 2007 and be completed in January 2008.

We note that there may some complexity in administering this grant given that the work will be well underway by the time the award is made. The grant management office will need to confirm that all conditions of the grant as indicated in the Grants Administration Policy have been met. This would include confirming that all past work is consistent with grant requirements for prevailing wage and other construction-related requirements.

INSTITUTIONAL COMMITMENT:

The applicant indicates that \$173,250 will be provided as institutional matching funds for the CIRM construction amount. In addition, \$210,714 in matching funds is provided for the \$842,856 requested from CIRM for equipment. The construction match represents 36 percent of the construction grant request, and thus exceeds the minimum matching requirement of 20 percent of the grant amount.

The applicant has also committed to addressing any cost overrun issues.

HISTORICAL PERFORMANCE:

Data for three projects undertaken between 2005 and 2007 and ranging in cost from 300,000 to \$400,000 were submitted for historical performance information. The actual costs ranged from 14 percent under to seven percent over the original budget. The scheduled completion dates for these projects were between 13 days earlier than scheduled to seven days later than scheduled. There were a total of three change orders executed for these projects.

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While the historical information indicates performance on a design-bid-build basis, the planned renovation is in leased space and therefore it is presumed that it would be accomplished on a negotiated basis with the building owner.

The applicant indicates that there has been only one renovation project undertaken in the last two years with a value of \$7.1 million.

RESPONSIVENESS:

Shared Laboratory: The applicant indicates that there are 10 researchers based at the host institution that are planning to undertake hESC research activities once additional NIH-free space is available. Additional PI's in the area are cited as being potential users of the facility. We would note that some of these potential users will overlap with other shared laboratory applications in this area.

Techniques Course: The applicant has not requested funding for operation of a shared a techniques course.

Facilities Work Group Issues

- **Timeline--**How will the Facilities Working Group address the early start of work prior to the application being granted?

The grant management office will need to confirm that all conditions of the grant as indicated in the Grants Administration Policy have been met. This would include confirming that all past work is consistent with grant requirements for prevailing wage and other construction-related requirements. This includes confirmation that equipment funds are budgeted pursuant the Grants Administration Policy as adopted December 7, 2006.